AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions, and listings, of claims:

1   1.   (Currently Amended) A method of establishing communications between

2   a base station and a system controller over a <u>Gb</u> network, comprising:

3   identifying a plurality of paths in the <u>Gb</u> network, each path defined by an

4   <u>Internet Protocol (IP)</u> address in the base station and an <u>IP</u> address in the system

5   controller<u>, wherein the plurality of paths are identified by different combinations of one</u>

6   <u>or more base station IP addresses and one or more system controller IP addresses</u>; and

7   selecting one of the plurality of paths <u>in the Gb network</u> to communicate

8   data associated with a given mobile station.

1   2.   (Currently Amended) ~~The method of claim 1~~ <u>A method of establishing</u>

2   <u>communications between a base station and a system controller over a network,</u>

3   <u>comprising:</u>

4   <u>identifying a plurality of paths in the network, each path defined by an</u>

5   <u>address in the base station and an address in the system controller; and</u>

6   <u>selecting one of the plurality of paths to communicate data associated with</u>

7   <u>a given mobile station,</u>

8   wherein selecting one of the plurality of paths comprises performing an

9   implicit negotiation in which the path is defined by a source address of a message

10   communicated by the base station and by a source address of a message communicated

11   by the system controller.

1   3.   (Original) The method of claim 2, wherein performing the implicit

2   negotiation comprises sending and receiving messages in a session having bi-directional

3   data flow.

1   4.   (Currently Amended) The method of claim [[1]] 2, wherein the network is

2   a packet-switched, connectionless network, and wherein selecting one of the plurality of

3   paths comprises selecting one of a plurality of virtual connections on the packet-

4   switched, connectionless network, each virtual connection based on a base station address

5   and a system controller address.

1   5.   (Original) The method of claim 1, further comprising selecting another

2   path by sending a message from another source address.

1   6.   (Original) The method of claim 5, wherein sending the message comprises

2   sending a UNITDATA message.

1   7.   (Original) The method of claim 1, further comprising selecting another

2   path by sending a change-route request.

1   8.   (Original) The method of claim 7, wherein sending the change-route

2   request comprises sending a General Packet Radio Service NS-CHANGEROUTE

3   request.

1   9.   (Original) The method of claim 7, wherein selecting another path by

2   sending the change-route request is part of an explicit path negotiation.

1   10.   (Currently Amended) ~~The method of claim 7~~ A method of establishing

2   communications between a base station and a system controller over a network,

3   comprising:

4   identifying a plurality of paths in the network, each path defined by an

5   address in the base station and an address in the system controller;

6   selecting one of the plurality of paths to communicate data associated with

7   a given mobile station; and

8   selecting another path by sending a change-route request,

9   wherein selecting another path by sending a change-route request is

10   performed during a session having unidirectional data flow between the base station and

11   the system controller.

1   11.   (Original) The method of claim 7, wherein sending the change-route

2   request comprises sending a request containing an identifier of a mobile station.

1   12.   (Original) The method of claim 11, wherein the identifier comprises a

2   General Packet Radio Service temporary logical link identifier.

1   13.   (Currently Amended) ~~The method of claim 7~~ A method of establishing

2   communications between a base station and a system controller over a network,

3   comprising:

4   identifying a plurality of paths in the network, each path defined by an

5   address in the base station and an address in the system controller;

6   selecting one of the plurality of paths to communicate data associated with

7   a given mobile station; and

8   selecting another path by sending a change-route request,

9   wherein sending the change-route request comprises sending the change-

10   route request using a new source address, and wherein selecting the other path is based on

11   the new source address.

1   14.   (Original) The method of claim 1, further comprising:

2   disabling an address; and

3   sending a change-route request containing the disabled address to change a

4   path for each mobile station assigned a path defined by the disabled address.

1   15.   (Currently Amended) A first system for use in a mobile communications

2   network, comprising:

3   a communications module adapted to communicate over a packet-

4   switched network coupled to a second system, the first system being one of a base station

5   and a system controller and the second system being another one of the base station and

6   the system controller;

7   a storage element containing one or more first addresses associated with

8   the first system; and

9   a control module adapted to select one of plural paths over the packet-

10   switched network, each path defined by one address associated with the first system and

11   one address associated with the ~~node~~ <u>second system,</u>

12   <u>the control module adapted to select one of plural paths over the packet-</u>

13   <u>switched network by performing an implicit negotiation in which a path is defined by a</u>

14   <u>source address of a message communicated by the first system and by a source address of</u>

15   <u>a message communicated by the second system.</u>

1   16.   (Currently Amended) The first system of claim 15, wherein the

2   communications module is adapted to communicate over a Gb interface provided in the

3   packet-switched network<u>, wherein the plural paths are Internet Protocol (IP)-based virtual</u>

4   <u>circuits of the Gb interface, each IP-based virtual circuit identified by a unique</u>

5   <u>combination of an IP address associated with the first system and an IP address</u>

6   <u>associated with the second system.</u>

1   17.   (Original) The first system of claim 15, comprising the base station.

1   18.   (Original) The first system of claim 15, comprising the system controller,

2   the system controller comprising a serving GPRS support node.

1   19.   (Canceled)

1   20.   (Currently Amended) The first system of claim 15, wherein each address

2   comprises an Internet Protocol address, and the control module is adapted to detect out-

3   of-order delivery of Internet Protocol packets in one of the paths over the packet-

4   switched network between the base station and the system controller.

1   21.   (Original) The first system of claim 15, wherein each path is further

2   defined by a User Datagram Protocol port of the first system and a User Datagram

3   Protocol port of the second system.

1   22.   (Original) The first system of claim 15, wherein the control module

2   comprises a load sharing task to select different paths for different mobile stations.

1   23.   (Original) The first system of claim 15, further comprising a GPRS

2   Network Service layer, the Network Service layer comprising the control module.

1   24.   (Original) The first system of claim 23, further comprising an upper layer,

2   the Network Service layer exchanging primitives with the upper layer.

1   25.   (Currently Amended) ~~The first system of claim 24~~ <u>A first system for use</u>

2   <u>in a mobile communications network, comprising:</u>

3   <u>a communications module adapted to communicate over a packet-</u>

4   <u>switched network coupled to a second system, the first system being one of a base station</u>

5   <u>and a system controller and the second system being another one of the base station and</u>

6   <u>the system controller;</u>

7   <u>a storage element containing one or more first addresses associated with</u>

8   <u>the first system;</u>

9   <u>a control module adapted to select one of plural paths over the packet-</u>

10   <u>switched network, each path defined by one address associated with the first system and</u>

11   <u>one address associated with the second system;</u>

12   <u>a GPRS Network Service layer, the Network Service layer comprising the</u>

13   <u>control module; and</u>

14   <u>an upper layer, the Network Service layer exchanging primitives with the</u>

15   <u>upper layer,</u>

16   wherein the primitives comprise an NS-UNITDATA-Request primitive

17   carrying outbound data and an NS-UNITDATA-Indication primitive carrying inbound

18   data, the NS-UNITDATA-Indication primitive containing a remote link selector

19   parameter, and the NS-UNITDATA-Request primitive containing the remote link

20   selector parameter and a local link selector parameter.

1   26.   (Original) The first system of claim 25, wherein the control module is

2   adapted to select an address associated with the first system based on the local link

3   selector parameter.

1   27.   (Original) The first system of claim 26, wherein the control module is

2   adapted to select an address associated with the second system based on the remote link

3   selector parameter.

1   28.-36. (Canceled)

1   37.   (Currently Amended) An article comprising at least one storage medium

2 containing instructions for establishing communications <u>over a network</u> between a base

3 station and a system controller, the instructions when executed causing a first node to:

4   identify a plurality of paths in the network, each path defined by an

5 <u>Internet Protocol (IP)</u> address in the base station and an <u>IP</u> address in the system

6 controller, the first node being one of the base station and system controller; ~~and~~

7   select one of the plurality of paths to communicate data associated with a

8 given mobile station<u>; and</u>

9   <u>send a message to decommission an IP address of one of the base station</u>

10 <u>and system controller.</u>

1   38.   (Currently Amended) ~~The article of claim 37~~ <u>An article comprising at</u>

2 <u>least one storage medium containing instructions for establishing communications over a</u>

3 <u>network between a base station and a system controller, the instructions when executed</u>

4 <u>causing a first node to:</u>

5   <u>identify a plurality of paths in the network, each path defined by an</u>

6 <u>address in the base station and an address in the system controller, the first node being</u>

7 <u>one of the base station and system controller; and</u>

8   <u>select one of the plurality of paths to communicate data associated with a</u>

9 <u>given mobile station,</u> ~~wherein the instructions when executed cause the first node to:~~

10   <u>wherein selecting</u> ~~select~~ one of the plurality of paths ~~by~~ <u>comprises</u>

11 performing an implicit negotiation in which the path is defined by a source address of a

12 message communicated by the base station and by a source address of a message

13 communicated by the system controller.

1   39.   (Currently Amended) The article of claim ~~37~~ <u>38</u>, wherein the network is a

2 packet-switched, connectionless network, and wherein the instructions when executed

3 cause the first node to select one of the plurality of paths by selecting one of a plurality of

4 virtual connections on the packet-switched, connectionless network, each virtual

5 connection based on a base station address and a system controller address.

1   40.   (Original) The article of claim 37, wherein the instructions when executed

2   cause the first node to further select another path by sending a message from another

3   source address.

1   41.   (Currently Amended) The article of claim 37, wherein the instructions

2   when executed cause the first node to further select another path <u>for each mobile station</u>

3   <u>assigned a path defined by the decommissioned address</u> by sending a change-route

4   request <u>containing a different IP address</u>.

1   42.   (Original) The article of claim 41, wherein the instructions when executed

2   cause the first node to send the change-route request containing an identifier of a mobile

3   station.

1   43.   (Currently Amended) ~~The article of claim 42~~ <u>An article comprising at</u>

2   <u>least one storage medium containing instructions for establishing communications over a</u>

3   <u>network between a base station and a system controller, the instructions when executed</u>

4   <u>causing a first node to:</u>

5   <u>identify a plurality of paths in the network, each path defined by an</u>

6   <u>address in the base station and an address in the system controller, the first node being</u>

7   <u>one of the base station and system controller;</u>

8   <u>select one of the plurality of paths to communicate data associated with a</u>

9   <u>given mobile station; and</u>

10   <u>select another path by sending a change-route request, wherein the</u>

11   <u>change-route request contains an identifier of a mobile station,</u>

12   <u>wherein the instructions when executed cause the first node to send the</u>

13   <u>change-route request using a new source address, and to select the other path</u> ~~is~~<u>based on</u>

14   <u>the new source address.</u>

1   44.   (Canceled).